



## Daily Current Affairs Prelims Quiz 05-09-2024 (Online Prelims Test)

1) Consider the following statements with respect to M-pox

1. It is a viral illness caused by the monkey-pox virus, a species of the genus Ortho-poxvirus.
2. It cannot be transmitted to the new-born during or after birth.
3. It can be treated by an effective antiviral vaccination.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

Answer : a

### Monkey pox



*The WHO Director General declared mpox a Public Health Emergency of International Concern (PHEIC).*

- Monkey pox is a viral illness caused by the monkey-pox virus, a species of the genus Ortho-poxvirus.
- Mpox is caused by the monkeypox virus (MPXV).
- It is an enveloped **double-stranded DNA** virus of the Ortho-poxvirus genus in the Poxviridae family, which includes variola, cowpox, vaccinia and other viruses.
- There are 2 distinct clades of the virus:
  1. Clade I (with subclades Ia and Ib)
  2. Clade II (with subclades IIa and IIb)
- In 2022–2023 a global outbreak of m-pox was caused by the clade IIb strain.
- **Transmission** – Mpox spreads from person to person mainly through close contact with someone who has mpox, including members of a household.
- Close contact includes skin-to-skin (such as touching or sex) and mouth-to-mouth or mouth-to-skin contact (such as kissing), and it can also include being face-to-face with someone who has mpox.
- People with multiple sexual partners are at higher risk of acquiring mpox.
- **During pregnancy or birth, the virus may be passed to the baby.**
- *Contracting mpox during pregnancy can be dangerous for the fetus or new-born infant and can lead to loss of the pregnancy, stillbirth, death of the new-born, or complications for the parent.*
- **Symptoms** – Skin rash or mucosal lesions which can last 2–4 weeks accompanied by fever, headache, muscle aches, back pain, low energy and swollen lymph nodes.
- **Congo** is the epicentre of an mpox outbreak that the World Health Organization declared to be a global public health emergency last month.
- Mpox is treated with supportive care for symptoms such as pain and fever, with close attention to nutrition, hydration, skin care, prevention of secondary infections and treatment of co-

infections, including HIV where present.

- **Treatment** - To date, ***there is no proven effective antiviral treatment for mpox.***

2) Consider the following statements with respect to Anoles

1. They are a specific type of lizard known for their distinctive features, including an ability to change skin colour.
2. It is native to South-east Asia region.

Which of the above statement(s) is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

## Anoles

- Anolis lizards are some of the best examples of both adaptive radiation and convergent evolution.
- They are a ***specific type of lizard known for their distinctive features, including an ability to change skin colour.***
- Anoles (genus Anolis) are a diverse group of lizards that have become a model system for studying evolutionary biology, particularly adaptive radiation and island biogeography.
- Anoles belong to the family Dactyloidae, order Squamata.
- Primarily found in the Americas, especially in the Caribbean islands and is ***native to neo-tropical and nearctic regions.***
- **Species Count** - Over 400 species described, making it one of the largest genera of reptiles.
- Adaptive Radiation
- Anoles are a classic example of adaptive radiation, a process where a single ancestral species diversifies into many descendant species adapted to different ecological niches.
- **Eco-morph** - Anoles have evolved into distinct "eco-morphs" - groups of species with similar morphological and behavioural adaptations to specific habitats:
  1. Crown-giant
  2. Trunk-crown
  3. Trunk-ground
  4. Twig
  5. Grass-bush
  6. Trunk
- Each eco-morph has specific adaptations in limb length, body size, and scale structure suited to its microhabitat.
- Island Biogeography
- The distribution and diversification of anoles in the Caribbean provide an excellent case study for island biogeography theory.
- **Allopatric Speciation** - Isolation on different islands has led to the evolution of distinct species.
- **Convergent Evolution** - Similar eco-morphs have evolved independently on different islands.
- **Island Size and Diversity** - Larger islands tend to have more anole species and eco-morphs.
- Evolutionary Adaptations
- Anoles exhibit several notable adaptations:
  - **Dewlaps** - Colourful throat fans used for communication and courtship.
  - **Toe Pads** - Specialized scales allowing them to adhere to various surfaces.

- **Colour Change** - Some species can change colour for camouflage or communication.
- **Roles in their ecosystems** - As insectivores, they help control insect populations.
- They serve as prey for various predators, including birds and snakes.
- They are indicators of environmental health in tropical and subtropical ecosystems.
- **Conservation Status** - Habitat loss and introduction of invasive species.
- Climate change affecting island habitats.

3) Consider the following statements with respect to Indian Graphene Engineering and Innovation (IGEIC)

1. It is implemented jointly by the Centre for Materials for Electronics Technology (C-MET), Digital University Kerala (DUK) and Tata Steel Limited.
2. Secretary of the Ministry of Electronics and Information Technology (MeitY) is the chairman of the council.

Which of the above statement(s) is/are incorrect?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

### Indian Graphene Engineering and Innovation (IGEIC)

*India Graphene Engineering and Innovation Centre (IGEIC) under the vision of Viksit Bharat@2047 was recently launched by Ministry of Electronics and Information Technology.*

- Indian Graphene Engineering and Innovation (IGEIC) is an initiative funded by the Ministry of Electronics and Information Technology (MeitY), State Govt. of Kerala and Tata Steel Limited, in association with various industries.
- IICG is implemented jointly by the Centre for Materials for Electronics Technology (C-MET), Digital University Kerala (DUK) and Tata Steel Limited
- IICG is envisioned to investigate the science and technology of graphene and other 2D materials.
- The centre envisages partnering effectively the industrial-academic activities in order to promote innovative and adventurous research with an emphasis on applications.
- It is a key initiative under the vision of Viksit Bharat@2047.
- The centre also aims to create facilities and sophisticated equipments to promote research in alignment with industry requirements.
- Secretary of the Ministry of Electronics and Information Technology (MeitY) is the chairman of the council.

4) Consider the following statements with respect to Andaman and Nicobar Islands Integrated Development Corporation

1. It is a quasi-government agency that was incorporated on 1988 under the Companies Act 1956.
2. It is the project proponent for the NITI Aayog-promoted crore mega infrastructure project in Great Nicobar.
3. Great Nicobar is the southernmost island in the Andaman and Nicobar archipelago.

How many of the statements given above are correct?

- a. Only one
- b. Only two

- c. All three
- d. None of the above

Answer : c

### **Andaman and Nicobar Islands Integrated Development Corporation (ANIIDCO)**

*Andaman and Nicobar Islands Integrated Development Corporation (ANIIDCO) is the project proponent for the crore mega infrastructure project in Great Nicobar which faced several criticism recently.*

- Andaman and Nicobar Islands Integrated Development Corporation is a **quasi-government agency** that was incorporated on 1988 under the Companies Act 1956.
- **Objective** – To develop and commercially exploit natural resources holistic and sustainable development of the territory.
- **Functions of the corporation** – ANIIDCO **ensures supply of petroleum products** like petrol, diesel and lubricants at various parts of A & N Islands.
- It is engaged in the **business of production and marketing of milk and milk products** since May 1991.
- It manages tourism resorts and infrastructure development.
- It is the **project proponent** for the **NITI Aayog**-promoted *crore mega infrastructure project in Great Nicobar*.
- **Great Nicobar is the southernmost island in the Andaman and Nicobar archipelago.**

